

NEW WETHERBEE SCHOOL, GRADES K-8, LAWRENCE, MA.
The Design Partnership of Cambridge, Inc., #9902

01/18/00

subgrade soils. Subgrade soils which become soft, loose, or otherwise unsatisfactory for support of structures as a result of inadequate excavation, dewatering, or other construction methods, shall be removed and replaced with crushed stone placed on geotextile fabric, structural fill or lean concrete, as required by the Owner's Geotechnical Engineer at no additional cost to the Owner. Any damage to work or adjacent properties from such water shall be the responsibility of the Contractor. All piping exposed above the surface for this use shall be properly covered to allow foot traffic and vehicles to pass without obstructions. All water from dewatering operation shall be directed to a siltation-settling device prior to discharge into the local watershed.

- C. Prior to foundation excavation, the general contractor shall, where necessary, design and install a system to carry out continuous pumping of ground water to maintain the ground water level at least 24 inches below the proposed bottom of excavation. The dewatering shall remain in effect until the formwork is removed, the concrete has cured for at least 48 hours, and the trench has been backfilled and compacted. All designs shall be prepared in accordance with 02200 - 1.04.B, above.
- D. **Frost Protection:** Do not excavate to full indicated depth when freezing temperatures may be expected, unless fill can be placed or concrete can be cast immediately after the excavation has been completed. Protect the excavation from frost if placing of fill or concrete is delayed. Should protection fail, remove frozen materials, and replace as directed at no cost to the Owner.

1.10 UNIT PRICES

- A. **Base bid volumes:** The following stated quantities should be included in the Contractor's base bid. Material quantities encountered that are greater than or less than these base bid volumes shall be subject to the provisions included herein.
 - 1. **Unsuitable materials:** The Contractor shall carry in his base bid the cost of removal of 200 CY of Unsuitable Material including replacement with specified material and compaction as specified. This allowance does not include any material within specified payment lines already included as part of the base bid.
 - a. If the total amount of Unsuitable Material is more than 200 CY, the Owner shall pay for the excess excavation at the unit price specified herein.
 - b. If the total amount of Unsuitable Material is less than 200 CY, the Contract sum will be decreased by the unit price specified herein.
 - 2. **Rock Excavation:** The Contractor shall carry in his base bid the cost for removing 3000 cubic yards of General Rock Excavation and 650 cubic yards of Trench Rock. The cost to include replacement with specified material at specified compaction and processing of rock for use as onsite fill as specified herein or legal disposal of material off site.
 - a. If the total amount of Rock Excavation exceeds the quantity of Rock Excavation included in the Contract as part of the base bid, the Owner shall pay for the excess excavation at the unit price specified herein.
 - b. If the total amount of Rock Excavation is less than the amount of Rock Excavation included in the Contract as part of the base bid, the Contract sum will be decreased by the unit price specified herein minus an allowance of up to \$8.00 per cubic yard for soil replacement of rock not needing to be removed.
- B. Should unanticipated conditions arise that result in an increase or decrease of certain classes of work from those required by the Contract Documents, the unit prices below shall be used, at the option of the Owner. The Unit Prices shall represent the exact net amount per unit to be paid to the Contractor (in case of additions or increases) or to be refunded to the Owner (in the case of decreases). No additional adjustment will be allowed for overhead, profit, insurance, or other direct or indirect expenses of the contractor or subcontractor. No amount, other than that herein specified, will be paid by the Owner for excavation herein defined.

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C. Unit Prices shall be applied to approved excavation of material that has been measured in place as specified herein.

1. Excavation and removal of unsuitable material at building area excavation and replacement with structural fill brought in from off-site, including placement and compaction as specified, price per cubic yard.	\$20.00
2. General rock excavation including all costs relating to such rock excavation, including blasting, dewatering, removal of the excavated material from the site and disposal, per cubic yard.	\$38.50
3. Trench rock excavation including all costs relating to such rock excavation, including blasting, dewatering, removal of the excavated material from site and disposal, per cubic yard.	\$45.00
4. Excavation and removal of unsuitable material at exterior pavements and site improvements including replacement with granular fill brought in from off-site, including placement and compaction as specified, price per cubic yard.	\$16.00

1.11 MEASUREMENTS

A. All measurements shall be performed on materials in place before excavation.

B. Unsuitable Materials:

- When Unsuitable Materials are encountered, the material shall be uncovered and the Contractor shall notify the Owner and the Architect before proceeding further. The areas in question shall then be cross-sectioned as hereinafter specified.
- Contractor shall forfeit the right of claim toward the stated allowance, or additional payments over and above the stated allowance at the quoted unit price, for failure to uncover such material and notify the Architect, and for proceeding with the excavation before cross-sections are taken.
- The Contractor shall employ and pay for an approved Registered Civil Engineer or Professional Land Surveyor to take cross-sections of unsuitable material before and after removal to make computations of volume encountered. Cross sections shall be taken in the presence of the Owner's Representative and Testing Agency. Provide the computations to the Architect.

C. Rock Excavation: Refer to Item 3.09 ROCK EXCAVATION for Definitions and Payment Lines.

- When material classified as Rock Excavation is encountered, the material shall be uncovered and the Architect shall be notified by the Contractor, before proceeding further. The areas in question shall then be cross-sectioned as hereinafter specified.
- Failure on the part of the Contractor to uncover such material and to notify the Architect, and proceeding by the Contractor with the excavation before cross-sections are taken, will forfeit the Contractor's right of claim towards the stated allowance or additional payments over and above the stated allowance at the quoted unit price.
- The Contractor shall employ and pay for an approved registered Civil Engineer or Professional Land Surveyor to take cross-sections of rock before and after removal to make computations of volume of rock encountered within the Payment Lines. Cross section shall be taken in the presence of the Project Representative and the computations provided to the Architect. The Owner has the option to perform independent cross-sections and computations of rock quantities.
- Where removal of boulder or ledge is required outside the established payment lines, the extent of this removal and basis of payment shall be determined by the Architect.

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